

3. The portable terminal of claim 2, wherein the hinge module comprises:

- a pair of first sun gears arranged upon the hinge axes, respectively; and
- a pair of second sun gears arranged between the first sun gears for enabling the first sun gears interact with each other.

4. The portable terminal of claim 2, wherein the hinge module comprises:

- a pair of first sun gears arranged upon the hinge axes, respectively; and
- a timing belt for making the first sun gear interact with each other.

5. The portable terminal of claim 2, wherein the hinge module comprises a pair of first sun gears arranged upon the hinge axes, respectively, wherein teeth of the first sun gears are engaged with each other so that when one of the first sun gear rotates, the other first sun gear rotates.

6. The portable terminal of claim 3, wherein the hinge module further comprises:

- an engagement plate for allowing the first sun gears to be rotatably engaged therewith; and
- a pair of guide grooves formed by partially cutting the engagement plate and guide protrusions formed at least one ends of the sliding housings, wherein the guide protrusions are engaged with the guide grooves and when the sliding housings rotate about each of the hinge axes with the folding cases, respectively, the guide protrusions move along an extended direction of the guide grooves.

7. The portable terminal according to claim 2, wherein the hinge module accommodated in the module groove further comprises a module groove formed on an inner surface of the module installation portion.

8. The portable terminal according to claim 1, further comprising a display provided in each of the sliding housings, wherein the displays are kept in contact at the corners of the sliding housings.

9. The portable terminal according to claim 1, further comprising keys installed on outer surfaces of the sliding housings, wherein when the folding cases and the sliding housings rotate, the keys are exposed or hidden by one of the folding cases.

10. The portable terminal according to claim 1, further comprising keys installed on outer surfaces of the sliding housings, wherein when the folding cases and the sliding housings are folded, the keys are opened, and when the folding cases and the sliding housings are unfolded, the keys are closed.

11. The portable terminal according to claim 9, wherein each of the sliding housings comprises an engagement portion formed by making a part of an outer surface of the sliding housing lower than the other parts of the outer surface of the sliding housing and the engagement portions are accommodated in the folding cases.

12. The portable terminal according to claim 11, wherein the keys are installed on surfaces of the engagement portions.

13. The portable terminal according to claim 11, wherein when the sliding housings are combined with the folding cases, outer surfaces of the other parts of the sliding housings except for the engagement portions are even with outer surfaces of the folding cases.

14. The portable terminal according to claim 11, further comprising:

- at least one sliding groove formed into the surface of each of the engagement portions, extending along a sliding direction of the sliding housings; and
- a sliding protrusion formed on an inner surface of each of the folding cases,

wherein when the sliding housings are engaged with the folding cases, the sliding protrusions guide sliding of the sliding housings, in engagement in the sliding grooves.

15. The portable terminal of claim 4, wherein the hinge module further comprises:

- an engagement plate for allowing the first sun gears to be rotatably engaged therewith; and
- a pair of guide grooves formed by partially cutting the engagement plate and, guide protrusions formed at least one ends of the sliding housings,

wherein the guide protrusions are engaged with the guide grooves and when the sliding housings rotate about each of the hinge axes with the folding cases, respectively, the guide protrusions move along an extended direction of the guide grooves.

16. The portable terminal of claim 5, wherein the hinge module further comprises:

- an engagement plate for allowing the first sun gears to be rotatably engaged therewith; and
- a pair of guide grooves formed by partially cutting the engagement plate and, guide protrusions formed at least one ends of the sliding housings,

wherein the guide protrusions are engaged with the guide grooves and when the sliding housings rotate about each of the hinge axes with the folding cases, respectively, the guide protrusions move along an extended direction of the guide grooves.

17. The portable terminal according to claim 10, wherein each of the sliding housings comprises an engagement portion formed by making a part of an outer surface of the sliding housing lower than the other parts of the outer surface of the sliding housing and the engagement portions are accommodated in the folding cases.

18. The portable terminal according to claim 1, further comprising a display provided in one of the sliding housing.

19. The portable terminal according to claim 8, wherein the display provided in each of the sliding housing operates independently.

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